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POWERLINE PULSE POSITION MODULATED
COMMUNICATION APPARATUS AND METHOD

Abstract of the Disclosure

5 A transmitting controller is connected to a powerline and
on command places a reference signal and a series of signal pulses in
the powerline at a series of signal timing positions related to zero
voltage crossing points so that the signals pulses are substantially
in the powerline temporal quiet zone. The receiving controller is
connected to the powerline and has a filter circuit therein which
filters away the powerline AC signal and noise to leave the reference
and signal pulses. The signal pulses are compared to the position of
starting reference pulses to determine in which signal timing
10 position the pulses have occurred. Digital data is communicated over
the powerline in accordance with the nature placement of the data
pulses related to the reference pulse positions. The timing zone for
transmission and signals is preferably about 500 to about 1000
microseconds away from zero voltage crossing.

LES571.AP2